Viamath Biver Dame Removal				PROJECT:							
	Klamath River Dams Removal Partial Removal Option Copco No. 2 Dam & Powerplant Removal				Klamath River Oregon						
					AF652	ESTIMATE LEVEL:		Foogibility			
	Most Probable - Escalation NOT Incuded			WOID:			RICE LEVEL:	Feasibility Jul-10			
	Life C	ycle - 50 Ye	ar	FILE:			ompleted Sheets\MP MPL M				
Summary							sx]Life Cycle Summary	FH102 - Copco 21140			
TNU TNU	ITEM										
PLANT ACCOUNT	PAYI		DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT			
		Periodic Co	ete - Vaar 1					0040.040.0			
		Periodic Cos						\$216,040.00			
	<u> </u>	 	sts - Year 17					\$119,410.5			
		—	sts - Year 25					\$110,660.0			
		 	sts - Year 33			<u> </u>		\$60,063.3			
	-	 	sts - Year 42					\$57,956.8			
		 	sts - Year 50					\$30,211.5			
	-							0.0			
			s - Maintenance			<u> </u>		\$967,383.0			
		(Assume	es gov't service / construction contra	cis)	was well as a second						
		Subtotal 1						\$1,561,725.1			
		Mobilizat	tion	5%	+/-			\$78,000.0			
		Subtotal 1 v	vith Mobilization					\$1,639,725.1			
		Escalation	on to Notice to Proceed (NTP): from	Unit Price Lev	el (July, 2010)	to NTP (J	ıly, 2020)	41,000,1001			
			a	ıt	per year for		months.				
			Subtotal 1 with Mobilization + Es	scalation to N	TP			\$1,639,725.1			
			Contingencies	10%	+/-			\$160,274.9			
		Subtotal 3 =	: Subtotal 2 + Design Contingenci	es				\$1,800,000.0			
		Allowand	e for Procurement Strategies (APS)	0%	+/-						
		Type	of solicitation assumed is: Competi-	ve Request for	Proposal						
		Subtotal 4 =	Subtotal 3 + APS					\$1,800,000.00			
		CONTRACT	COST					\$1,800,000.00			
		Construc	tion Contingencies	20%	+/-			\$400,000.00			
		FIELD COST	Г					\$2,200,000.00			
		Non-Con	tract Costs	30%	+/-			\$700,000.00			
		(Environn	nental Cultural / Mitigation ~ 7%,	1							
		Engineer	ing Design ~ 5%, Maintenance Serv	ice Contract ~	5%						
		Procurem	nent ~ 2%, Inspections ~ 10%								
		and Close	eout ~ 1%)					// //			
		CONSTRUC	TION COST					\$2,900,000.00			
			stimate completed 4/17/11, revised r								
			ropriate use and terminology, see R	eciamation Ma	nual, Directive			9-02 and 09-03.			
		QUA	NTITIES	D.V. A	16		IICES	· · · · · · · · · · · · · · · · · · ·			
			CHECKED	BY Ay	13th		CHECKED	1 , 1,21			
Rick Benik Stephen Latham					Greg Akins		Du taf	2-4/15/11			
DATE PREPARED PEER REVIEW / DATE			DATE PRE	PARED		PEER REVIEW /	DATÉ / / /				
3/24/11			Tom Hepler P.E. 3/25/11	<u> </u>			40	W/D/U			

FEA	ATURE:			PROJE	PROJECT:						
		nath River D ial Removal	Dams Removal I Option		Klamath River Oregon						
ı	Copo	o No. 2 Da	ım & Powerplant Removal	WOID:	AF652	ESTIM/	ATE LEVEL:	Feasibility			
	Most	: Probable I	High- Escalation NOT Incuded	REGION	MP		RICE LEVEL	Jul-10			
	Life (Sumi	Cycle - 50 Y mary	/ear	FILE:	U:\2011 Projects\ Escalation\[Copc	Klamath\002 Completed Sheets\MP MPL o 2 MPH - Probable.xlsx]Life Cycle Summ		L MPH\02 - Copco 2\No			
PLANT ACCOUNT	РАҮ ІТЕМ		DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT			
		Periodic Cos	sts - Year 1				-	\$247,680.0			
		Periodic Cos	sts - Year 5					\$157,217.2			
		Periodic Co	sts - Year 10			1		\$128,447.0			
		Periodic Co	sts - Year 13					\$32,667.6			
		Periodic Co	sts - Year 15					\$104,941.7			
		Periodic Co	sts - Year 20			1		\$85,737.1			
		Periodic Co	sts - Year 25			1		\$90,160.4			
		Periodic Cor	sts - Year 30			1		\$57,230.6			
		Periodic Cor	sts - Year 35					\$46,756.6			
	<u> </u>	Periodic Cor	sts - Year 38		<u> </u>			\$11,891.4			
	Ĺ	Periodic Cor	sts - Year 40					\$38,201.2			
	Ĺ!	Periodic Cos	sts - Year 45					\$31,210.2			
	Ĺ!	Periodic Cos	sts - Year 50					0.0			
		 	ts - Maintenance					\$2,944,208.0			
			es gov't service / construction contracts)								
		Subtotal 1						\$3,976,349.4			
		Mobilizat	tion	5%	+/-			\$200,000.00			
		-	with Mobilization					\$4,176,349.42			
		Escalation	on to Notice to Proceed (NTP): from Unit Price	e Level (July, 2	2010) to NTP (July, 2020)					
		L	None Include		per year for		months.				
		 	= Subtotal 1 with Mobilization + Escalation	to NTP				\$4,176,349.42			
\longrightarrow			Contingencies	15%	+/-			\$627,594.58			
			Subtotal 2 + Design Contingencies					\$4,803,944.00			
			ce for Procurement Strategies (APS)	2.0%	+/-			\$96,056.00			
			of solicitation assumed is: Selective Request	t for Proposal							
			Subtotal 3 + APS					\$4,900,000.00			
		CONTRACT						\$4,900,000.00			
			tion Contingencies	25%	+/-			\$1,200,000.00			
		FIELD COST	All the second s					\$6,100,000.00			
			tract Costs	35%	+/-			\$2,100,000.00			
			mental Cultural / Mitigation ~ 10%,		ļ						
		Engineering Design ~ 7%, Maintenance Service Contra		act ~ 5%							
			nent ~ 2%, Inspections ~ 10%					-			
		and Closeout ~ 1%)									
		CONSTRUCT	NON COST					\$8,200,000.00			
		Ref.: For app	ropriate use and terminology, see Reclamatio		ectives and Sta	andards FAC	0: 09-01, 09-02 and	4 09-03			
			QUANTITIES			PRIC		1 00 00.			
ΙΥ							CHEÇKED /				
ick Ber	nik		Stephen Latham	BY ga	Gireg Akins	E	1. Col. 1.60111				
		PARED	PEER REVIEW / DATE	DATE PR			PEER REVIEW	/DATE			
3/24/11			Tom Hepler P.E. 3/25/11		had Pleasure		ACD	6715/11			

FEA	EATURE:				PROJECT:					
	Klamath River Dams Removal Partial Removal Option				Klamath River Oregon					
			m & Powerplant Removal	WOID:	AF652	ESTIM	ATE LEVEL	Feasibility		
	Most	Probable L	ow- Escalation NOT Incuded	REGION	I MP	-	PRICE LEVE	Jul-10		
		ycle - 50 Y	ear	FILE:	U:\2011 Projects\	Klamath\002 (Completed Sheets\MP MPL MPH\02 - Co			
	Sumi	nary			2\No Escalation\(Copco 2 MPL		- Probable.xlsx]Life Cycle Summary			
PLANT ACCOUNT	PAY ITEM		DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT		
	<u> </u>	Boriodio Co	-1- V4							
	 	Periodic Co	sts - Year 1 sts - Year 17		 		 	\$175,470.00		
						 	-	\$66,899.0		
	 		sts - Year 25				- 	\$15,652.80		
	<u> </u>		sts - Year 33			<u> </u>		\$35,037.5		
	ļ		sts - Year 50			<u> </u>		0.00		
-		(Assume	es gov't service / construction contracts)					~		
		Annual Cost	s - Maintenance					\$630,902.00		
		Subtotal 1						\$022 061 31		
A-112		Mobilizat	tion	5%	+/-	<u> </u>	+	\$923,961.38		
	\vdash		with Mobilization		T /-	 	-	\$46,000.00		
	-		on to Notice to Proceed (NTP): from Unit Price Le	aval (luly 2010)	+- NTD / July	0000)	-	\$969,961.38		
			None include	<u> </u>		1	months			
		Subtotal 2 =	Subtotal 1 with Mobilization + Escalation to		per year for	 	months.	\$060 061 30		
			Contingencies	8%	+/-	-	 	\$969,961.38		
			Subtotal 2 + Design Contingencies	0 /0	177			\$80,038.62		
	 		te for Procurement Strategies (APS)	0%	+/-		 	\$1,050,000.00		
			of solicitation assumed is: Full and open sealed				 			
	 		: Subtotal 3 + APS	Dia compenion			 	** >== 200 00		
	 	CONTRACT						\$1,050,000.00		
				100/			ļ	\$1,050,000.00		
			tion Contingencies	18%	+/-		ļ	\$200,000.00		
		FIELD COST						\$1,250,000.00		
			tract Costs	25%	+/-		ļ	\$400,000.00		
		(Environmental Cultural / Mitigation ~ 5%, Engineering Design ~ 4%, Maintenance Service Contract ~ 4%				ļ				
			nent ~ 1%, Inspections ~ 10%							
			eout ~ 1%)							
		CONSTRUC	TION COST					\$1,650,000.00		
		Ref.: For app	ropriate use and terminology, see Reclamation N	/anual, Directive	s and Standar	rds FAC; 0	9-01, 09-02 and	09-03.		
			QUANTITIES		,	PRICE	ES			
3Y			CHECKED	BY 9	w.H.		CHECKED /			
			Stephen Latham		Greg Akins	d	Litaly	12 (1/15/11		
DATE PREPARED PEER REVIEW / DATE			DATE PRI		/	PEER REVIE	W/DATE			
03/24/11 Tom Hepler P.E. 3/25/1			Tom Hepler P.E. 3/25/11				NED 4/15/11			